

|       |      |   |
|-------|------|---|
| PC43  | EC 1 | ASTVIHYEIPEREK-----GFAVGNVVANL--GLDLGSLSA--   |
|       | EC 2 | PTQEMKLEISEAVAP-----GTRFPLESAH---DPDLGSNSL--  |
|       | EC 3 | NQSLYRARVPGGCTS-----GTRVVQVLAT---DLDEGPNGE--  |
|       | EC 4 | TVTSVYSPVPEDAS-----GTVIALLSVT---DLDAGENGL--   |
|       | EC 5 | SQSSYDVYIEENNLP-----GAPILNLSVM---DPDAPONAR--  |
|       | EC 6 | LYPRPGGSSVEMLPRTSA-GHLVSRVVGW---DADAGHNAW--   |
| PC42  | EC 1 | VP EEGPPNTLI-----GSL-----AADYGFDPVG-          |
|       | EC 2 | ASPVITLAIPENTNI-----GSLFPIPLAS---DRDAGPNGV--  |
|       | EC 3 | ERPSYEAELSENSPI-----GHSVIOVKAN---DSDQGANAEE-- |
|       | EC 4 | EIRGIGLVTHQDGMANISEDVAEETAVALVQVSDRDEGENAA--  |
|       | EC 5 | TQSVTEVAFPENNKP-----GEVIAEITAS---DADSGSNAE--  |
|       | EC 6 | MLSGYNFVSMENMPA-----LSPVGMVTVI---DGDKGENAO--  |
|       | EC 7 | TAPSN TSHKLLTPQTRL---GETVSQVAAE---DFDSGVNAE-- |
| FAT   | EC18 | EDTVYSFDIPENAQR-----GYQVGQIVAR---DADLGQNAQ--  |
| N-CAD | EC 1 | DWVIPPINLPENSRG-----PFPQELVRIRS---DRDKNLSLRYT |
|       | EC 2 | LHQVWNGTVPEGSKP-----GTYVMTVTAI---DADDPNALNGM  |
|       | EC 3 | TAMTFYGEVPENRVD-----IIVANLTVT---DKDQHPHPAWN   |
|       | EC 4 | APNPKIIRQEEGLHA-----GTMLTTFTAG---DPDRYMQQN--  |
|       | EC 5 | LPQEAETCETPDNPSINITIAL-----DYDIDPNAGP-        |
| MOTIF |      | *****V*EN***-----GT*v**v*A*---D*D*G*N*---     |

FIGURE 1A

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PC43  EC 1  RRFVVGASRR-----FFEVRNRET-----GEMFVNDR-----
      EC 2  QTYELSRNEY-----FALRVQTRDSTKYAELVLER-----
      EC 3  IIYSFGSHNRAGVRQL--FALDLVT-----GMLTIKGR-----
      EC 4  VTCEVPPGLP-----FSLTSSLKNYFTLKTAD-----
      EC 5  LSFFLLEQGAETGLVGRYFTINRDN-----GIVSSSLVP-----
      EC 6  LSYSLFGSPNQSL-----FAIGHT-----GOISTARPV-----

PC42  EC 1  HLYKLEVGAP-----YLRVDGKT-----GDIFTTETS-----
      EC 2  ASYELOVAED-----QEEKOQLIVMGN-----
      EC 3  IEYTFHOAPEVVRRL---LRDRNT-----GLITVOGP-----
      EC 4  VTCVVAGDVP-----FOLROASETGDSKKYFLQTTTP
      EC 5  LVYSLEPEPAAKGL-----FTISPET-----GEIQVKTS-----
      EC 6  VQLSVEODNGD-----FVIQNGT-----GTILSSLS-----
      EC 7  LIYSIAGGNPYGL-----FOIGSHS-----GAITLEKE-----

FAT   EC18  LSYGVVSDWANDV-----FSLNPQT-----GMLTLTAR-----

N-CAD EC 1  VTGPGADQPPTGI-----FIINPIS-----GQLSVTKP-----
      EC 2  LRYRIVSOAPSTPSNM--FTINNET-----GDIITVAAG-----
      EC 3  AVYRISGGDPTGR-----FAIQIDPNSND--GLVTVVVKP-----
      EC 4  IRYTKLSDPAN-----WLKIDPVN-----GOITTIIV-----
      EC 5  FAFDLPLSPVTIKRN---WTITRLN-----GDFAQLNLK-----

MOTIF      I*O*I*****O*I***T-----G*I*T***-----

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FIGURE 1B

|       |      |  |
|-------|------|--|
| PC43  | EC 1 | LDRLCGLPSCVTLELVENP-----LFLSVLEVVIDINDNNPAF                                    |
|       | EC 2 | LDREPSQLVLTALDGGTPAL-----SASLPIHIKVLVDANDNAPVF                                 |
|       | EC 3 | LDFEDTKLHEIYIOAKDGANPE-----GAHCKVLVEVVDVNDNAPEI                                |
|       | EC 4 | LDRETVPYNLSITARDAGTPSL-----SALTIVRVQVSDINDNPPQS                                |
|       | EC 5 | LDYEDRRFELTAHISDGGTPVL-----ATNISVNI FVTDNRDNAPQV                               |
|       | EC 6 | ODTDSPRQTLTVL-IKNGEPSLSTATLTVSVTEDSPEARAEFPSSAPREQKN                           |
| PC42  | EC 1 | IDREGLRECONQLPGDPCILEFEVSIIDL VQNAS--PRLLEGQIEVODINDNTPNF                      |
|       | EC 2 | LDREWRDSYDLTIKVODGGSPPR-----ATSALLRVTVLDTNDNAPKF                               |
|       | EC 3 | VDREDLSTLRFSLAKDRGTNPK-----SARAQVVVTVKMDNDNAPTI                                |
|       | EC 4 | LDYEKVKDYTIEIVAVDSGNPPL-----SSTNSLKVQVVVDVNDNAPVF                              |
|       | EC 5 | LDREQRESYELKVVAADRGSPSL-----QGTATVLVNVLD CNDNDPKF                              |
|       | EC 6 | FDREQQSTYTFOLKAVDGGVPPR-----SAYVGV TINVL DENDNAPYI                             |
|       | EC 7 | IERRHHGLHRLVVKVSDRGKPPRYGTALVHLVYVNETLANRTLLETLLGHSLDTPLD<br>IDIAGDPEYERSKQRGN |
| FAT   | EC18 | LDYEEVQHYILIVQAODNGQPSL-----STTITVYCNVLDLNDNAPIF                               |
| N-CAD | EC 1 | LDREQIARFHLRAHAVDINGNQV-----ENPIDIVINVIDMNDNRPEF                               |
|       | EC 2 | LDRENVQQYTLIIQATDMEGITYGL-----SNTATAVITVTDVNDNPPEF                             |
|       | EC 3 | IDFETNRMFVLTVAAENQVPLAKGIQHP-----QSTATVSVTVIDVNE-NPYF                          |
|       | EC 4 | LDRESPNVKNNIYNATFLASDNGIPPM-----SGTGTLQIYLLDINDNAPQV                           |
|       | EC 5 | IKFLEAGIYEVPIIITDSGNPPKSNIS-----ILRVRCQCD FNGDCTDVDR                           |
| MOTIF |      | LDRE****O*L*v*A*D*G*P*-----**T*TV*v*v*D*NDNAP*F                                |

FIGURE 1C